REMARKS

This Amendment is filed in response to the Office Action mailed Sept. 26, 2007. The Applicant respectfully requests reconsideration in light of the below discussion. All objections and rejections are respectfully traversed.

Claims 1-12 and 14-23 are now pending in the case.

Claims 1-4 and 6, 8, 10-12 and 14-23 have been amended to standardize the usage of certain terminology, and to address minor informalities. Such amendments are made for reasons unrelated to patentability.

Claim 13 has been cancelled without prejudice.

Claim Rejections - 35 U.S.C. §102

At paragraphs 2-3 of the Office Action, claims 1, 10-17, and 19 were rejected under 35 U.S.C. §102(e) over Bellenger, U.S. Patent No. 5,949,786 (hereinafter "Bellenger").

The Applicant's claim 1, representative in part of the other rejected claims, sets forth (emphasis added):

> 1. A method for routing a source routed packet to a Source Route Bridge (SRB) subnet for a destination station, comprising:
>
> ***maintaining an address resolution protocol table (ARP table) in a router having an entry for each station on said SRB subnet*** to which said router routes packets, ***said entry having a first field containing a Layer 3 address of said each station, said entry having a second field containing a Layer 2 address of said each station including a physical (MAC) address and Route Information Field information (RIF information) from said router to said each station***; and
>
> writing said RIF information read from said second field of said ARP table into a Route Information Field (RIF) in a message packet before routing said message packet to said SRB subnet for said destination station.

Bellenger discusses tag-based switching. A switch maintains a route table memory having a plurality of locations that are associated with tags. *See* col. 2, lines 55-59.

As part of a matching operation, match logic "compares the identifying tag [of an incoming frame] with the tag stored in the particular location to determine whether the incoming frame matches the network flow identified by the stored tag, and supplies the routing information stored in the particular location if a match occurs." *See* col. 2, line 64 to col. 3, line 4 and abstract.

The Applicant respectfully urges that Bellenger is silent concerning the Applicant's claimed "***maintaining an address resolution protocol table (ARP table) in a router having an entry for each station on said SRB subnet…said entry having a first field containing a Layer 3 address of said each station, said entry having a second field containing a Layer 2 address of said each station including a physical (MAC) address and Route Information Field information (RIF information) from said router to said each station.***"

The Applicant claims a novel technique for improving the operation of a router by including both a MAC address and RIF information in an ARP table. However, Bellenger does not even mention of an ARP table. While the Applicant has diligently searched Bellenger, no mention of such a structure may be found. Further, the Office Action does not specifically cite to any portion of Bellenger as allegedly showing this feature. *See* Office Action page 2 (stating absent citation that "Bellenger discloses the ARP table data structure stored in a computer memory of a router.")

Since Bellenger does not mention an ARP table, Bellenger can not possibly teach including specific information in fields of ARP table entries as the Applicant claims. The structures in Bellenger cited in relation to the Applicant's claimed fields of ARP table entries relate instead to a variety of different parts of a network and different switch components.

For example, the Applicant claims an ARP table "***entry having a first field containing a Layer 3 address of said each station.***" However, col. 1, lines 19-35 and 41-69 of Bellenger cited in relation to this feature generally describe a computer network and the existence of level 3 protocols, stating:

> When a number of networks merge at a common point, network routers or switches are used for the purposes of directing the traffic among the interconnected networks which use a variety of protocols. In typical data networks, frame routing is based on address information that is stored in each frame of data being transmitted in the network. In contrast, telephone networks have typically been implemented based on channels of data specified by information external to the data being transmitted. The network routers used to interconnect networks of different types of protocols have been based on switching techniques and on routing techniques. Switching and routing in this context refer to the process by which the network router determines a new destination for a frame which is received at the router. The difference between switching and routing in the data networking environment arises primarily in a complexity of the equipment….
>
> Generally switches implemented in parallel logic operate much faster than routers, which typically depend on serialized logic. The penalty for the increased speed of data switches compared to routers comes from the fact that switches are inflexible in the protocols that they can route.
>
> Typically the simplest level of data addressing is the link-layer ethernet address. This address allows the construction of fairly large bridged networks by means of the Spanning Tree 802.1d bridge protocol. Ultimately the size of these networks is limited to some tens of thousands of addresses. To access larger numbers of addresses (internetworks), a more sophisticated addressing protocol is used. These more robust protocols are generally referred to as network layer or "level 3" protocols. The most common of the level 3 protocols is the Internet Protocol. Although some switches can analyze the most common level 3 protocols, their functionality is generally limited and not as flexible as the analysis available from a router.

Similarly, the Applicant claims an ARP table "***entry having a second field containing a Layer 2 address of said each station including a physical (MAC) address.***" However, Fig. 2 of Bellenger simply shows a MAC "control block" attached to a port, and col. 4, line 57 to col. 5, line 16 of Bellenger simply describe hardware components of a switch, stating:

> Each of the ports, 101-1 through 101-x is coupled to a bus 104. The bus 104 is coupled to a flow detect logic block 105 which includes hash generators and protocol detect logic for a plurality of network flows. In addition, the bus 104 is coupled to a bus arbiter 106. The bus arbiter 106 provides a memory interface 107 to off-chip memory 108, such as Rambus dynamic random access memory RDRAM. In addition, the arbiter 106 provides an interface 109 to a host CPU 110. The host CPU 110 executes route table management software, and stored program router software in one embodiment of the present invention. In alternative systems, the stored program router software is provided by an additional CPU or host processing system which is coupled to the flow switch 100 across a backplane, not shown, or at an end station, such an end station coupled to port 101-2.
>
> The memory 108 stores a route table 120 and frame buffers 121. The route table 120 includes a plurality of accessible memory locations, which are accessed in response to a set of N bits taken from the hash provided by the flow detect logic 105. Each entry in the route table 120 includes a tag field 122, a route information field 123, and control fields 124. The tag field as explained in more detail below, stores M bits, which are used

in combination with the N bit address for providing unique identification of the network flow for which the routing information in field 123 is provided. The control field 124 is used for cache aging and other processes as known in the art.

Accordingly, for the reasons discussed above the Applicant respectfully requests reconsideration of the rejection.

Claim Rejections - 35 U.S.C. §103

At paragraphs 4-5 of the Office Action, claims 18 and 20-21 were rejected under 35 U.S.C. §103(a) over Bellenger in view of Leong et al., U.S. Patent No. 6,269,398 (hereinafter "Leong").

At paragraph 6 of the Office Action, claims 22-23 were rejected under 35 U.S.C. §103(a) over Bellenger in view of Hrastar et al., U.S. Patent No. 6,272,150 (hereinafter "Hrastar").

Claims 18 and 20-23 are dependent claims that depend from independent claims believed to be allowable for the reasons discussed above. Accordingly, the Applicant respectfully urges that claims 18 and 20-23 should be allowable due to such dependency, as well as for other separate reasons.

Should the Examiner believe telephonic contact would be helpful in the disposition of this Application, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.

In summary, all the independent claims are believed to be in condition for allowance and therefore all dependent claims that depend there from are believed to be in condition for allowance. The Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

_/James A. Blanchette/_____
James A. Blanchette
Reg. No. 51,477
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500